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ASSESSMENT AND THE ATTAINMENT OF STUDENTS' LEARNING OUTCOMES IN TEACHER TRAINING COLLEGES IN FAKO AND MEME DIVISIONS, CAMEROON

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Abstract:
The focus of this paper is on assessment for learning – formative assessment and assessment of learning – summative assessment. The study was conducted by the use of a descriptive survey research design, specifically the cross-sectional quantitative approach. The instrument used for data collection was a questionnaire designed for student-teachers in training and an evaluation form for student-teachers on teaching practice for Teachers Grade One certificate examination (CAPIEM). The overall percentages of the 6 items on Formative assessment indicated that a large majority of participants' opinions (92.3%) were for the fact that formative assessment has an influence on student-teachers' learning outcomes. Also, a large majority (93%) of the respondents agree that formative assessment monitors their progress and enables them to demonstrate and apply the skills and knowledge acquired, while 7% were contrary to the idea. Equally, participants largely agreed that summative assessment play a major role on attaining student-teachers' learning outcomes. Analysis of the 6 items revealed an overall percentage of 91.7% of respondent were largely of the opinion that summative assessment has an influence on student-teachers' learning outcomes. For example, 91% of the students agreed that the ability of the teacher to test them at the end of the unit, course or programme provided them with the opportunities to demonstrate the skills, knowledge and attitudes that provided evidence that learning has occurred. The findings generally revealed that assessment for learning enhanced the learning outcomes of student-teachers. Student-teachers were able to demonstrate what they had learned in class during teaching practice sessions. Whereas assessment of learning describes the extent to which students have achieved the learning goals, including standards demonstration of what the student knows and can do.

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1. Introduction

The relationship between assessment and learning is fundamental to formal education which on the one hand ideally seeks to know and build on what has already been learnt. On the other hand, it usually requires some measure of what has been learnt to judge either the learner or the teacher, or both the learner and the teacher (Lyonga, 2015). The former is pedagogic in character while the latter is social. Both functions of assessment have been discussed extensively in the assessment literature. Literature on the pedagogic role of assessment addresses theories of both assessment *for* learning – formative assessment and assessment *of* learning – summative assessment (Taras, 2005; Lyonga, 2015; Dixson & Worrell, 2016). The social function of assessment, often mediated by summative assessment, has also been an important part of the discourse. Given the social and economic value of academic qualifications (Taras, 2005), assessment of learning has significantly contributed both to subverting and maintaining power relations in different societies (Tabulawa, 1997; 2003; Struyven et al., 2005; Segers et al., 2008).

According to Biggs and Tang (2007), assessment does not only focus on whether students have mastered the contents of the disciplines learnt, but also focuses on whether students can apply or use the acquired knowledge, skills and attitudes in the real world which is the end results of a whole period of learning (learning outcomes).Thus, assessment procedures indicate if students can apply what they have learned in real life situations. Student's learning outcomes are the measurable results that are expected subsequent to a learning experience. These outcomes may involve knowledge (cognitive), skills (behavioral), or attitudes (affective) that provide evidence that learning has occurred as a result of a specified course, program, activity, or process. Assessment could be based on performance that is related to real life situations, more practical, functional and operational; a form of assessment in which students are asked to perform real-life tasks that demonstrate meaningful application of essential knowledge and skills, (Black & William, 1998; (Huba and Freed, 2000).

According to Tambo (2012), assessment is the process of measuring the quality and quantity of learning and teaching using various assessment strategies. He further stated that we assess to monitor accuracy towards goals attainment; to see if objectives have been achieved, (that is, to show the gap between what is desired and what is attained); to predict and anticipate possible actions; to identify students' strengths and weaknesses; to provide feedback to students on their learning and progress; to motivate students to improve their performances; to support and guide teaching-learning, to select students for specific level or programme of teaching; to inform decisions on progression and awards; to demonstrate that appropriate standards are being maintained; and to evaluate the effectiveness of teaching.

The most visible forms of assessment in our schools today are continuous and summative assessments which take the form of making final judgments about students' learning outcomes and instructional effectiveness. Assessment of learning (summative assessment) at all levels of education in Cameroon is mostly school based. Little or no attention is paid to assess if students can apply what they have learned in real life situations (assessment for learning). Simmons (2002) cited that the major driving force behind assessment is the perceived gap between what is taught, learnt, assessed in school and what is needed in the external environment. According to Biggs (1999), assessment is a crucial link between learning outcomes, content and teaching-learning activities. Assessment is vital in determining students' learning outcomes (assessment for learning and assessment of learning). From the above standpoint, assessment for learning and assessment of learning are very important forms of assessments in judging students' learning outcomes. In fact, assessment in education comes in two forms, that is, assessment for learning – formative assessment, and assessment of learning – summative assessment (Lyonga, 2015; Dixson & Worrell, 2016; Demore, 2017; Das, et al., 2017).

Formative assessment, for learning assessment, tends to provide students with feedback on their own performance and guide them. It also helps shape their learning. Typically, these types of assessment are carried out concurrently with instructions. Formative assessment aims to see if students understand the instructions before doing a summative assessment (McTighe & O'Connor, 2005). Its main purpose is to modify teaching and learning to improve students' learning outcomes. It can be of a formal or informal nature (Crooks, 2001). Formative assessment is conducted throughout the course or learning modules. It is not used for decision making on students' academic progress. On the other hand, summative assessment is to sum up learning (Black & William, 1999; 2009). Formative assessment looks at post achievements meanwhile summative assessment, of learning assessment, is meant to make decisions on students' academic performance including pass/fail decisions or eligibility for licensure or standardized testing, etc. Summative assessment is typically formal in nature and conducted at the end of the course or learning modules, at the end of training. It determines whether the goals of learning are being fulfilled.

2. Review of Concepts

2.1 The Concepts of Assessment and Learning Outcomes

Assessment is the process of gathering and interpreting evidence to make judgments about students' learning. It is the crucial link between learning outcomes, content, teaching and learning activities. Assessment is used by learners and their teachers to decide where the learners are at a given point in their learning, where they need to go and how best to get there (Assessment Reform Group, 2002). The purpose of most instructional assessment is to improve learning, inform teaching, help students achieve the highest standards they can and provide meaningful reports on students' learning outcomes, (Black & William, 1998).

According to Dylan (2011), assessment is "*a process of obtaining information that is used for making decisions about student, curriculum, and educational policy.*" It can therefore be a process of collecting information about students' learning and performance to improve education. It helps in measuring student's ability in acquiring certain behaviour or a specific knowledge for a particular subject, and provides the basis of ascertaining the quality of education at all levels. Assessment enables the school to achieve an overall objective of having as complete a record of the growth and progress of each student as possible in order to make unbiased judgments in the cognitive, affective, and psychomotor evaluation in the classroom. Although there are various forms of assessment, assessment in education comes mostly in two forms: assessment *for* learning – **formative assessment** and assessment *of* learning – **summative assessment** (Taras, 2005; Dixson & Worrell, 2016). It is against this backdrop that this research is designed to investigate how assessment influences students' learning outcomes in Teacher Training Colleges in Fako and Meme Divisions of Cameroon. As briefly distinguished above, the purpose of this paper is to describe the role of assessment on the attainment of students' learning outcomes in Teacher Training Colleges in Fako and Meme Divisions of Cameroon, with focus on: assessment *for* learning – **formative assessment** and assessment *of* learning – **summative assessment**.

2.2 Formative Assessment (Assessment for Learning)

Formative assessment is referred to as "assessment for learning" and is done continuously throughout a course unit. The purpose of this type of assessment is to assess the progress of students' learning throughout the unit. This form of assessment provides teachers with the information they need to create an inclusive program that meets the needs of all students throughout the unit. The results gained from this assessment do not count towards grades on a report card, (McMillan, 2001). Formative assessment occurs when teachers feed information back to learners in ways that enable learners to know better, or when learners can engage in similar, self-reflective processes. Thus, results of formative assessments are used to modify and validate instruction. According to Castling (1996), formative assessment refers to measuring learners' progress towards a goal so that the teacher can give them feedback to help learners improve in their performances. Formative assessment refers to the frequent, interactive assessment of student progress to identify learning needs and shape teaching (OECD, 2011). According to ARG (2002), formative assessment has stated principles: is part of effective planning, focuses on how students learn, is central to classroom practice, is a key professional skill, has an emotional impart, affects learner's motivation, promotes commitment to learning goals and assessment criteria, helps learners know how to improve, encourage self-assessment and recognizes all achievements and outcomes.

Tchombe (2004) stated that formative assessment is any assessment made during the school year that is meant to improve learning and help shape and direct the teaching and learning process. The teacher identifies the weak students for amelioration, modify and plan remedial work. Formative tests, micro teaching, presentation, oral tests are not

graded and are used as an on-going diagnostic tool, hence, the teacher employs the results of formative assessment solely to modify and adjust practices, to reflect the needs and progress of learners (Quansah, 2005).

Santrock (2004) commended that formative assessment is the frequent, interactive assessment of students' progress to identify learning needs and shape teaching. Black and William (1998) argued that, assessment for learning is any assessment for which the priority for its design is to serve the purpose of promoting learning compared to assessment design that serves to provide information to be used as feedback by teachers and pupils in assessing themselves to modify teaching. William and Thompson (2008) observed that "*...an assessment is formative to the extent that information from the assessment is fed back within the system and actually used to improve performance of the system in some way*". According to Stiggins (2002), when teachers assess for learning, teachers use the classroom and practiced teaching assessments process and the continuous flow of information about learners that it provides in order to advance, not merely to check on the learner learning.

Black and William (1998) said that formative assessment goals are explicit, and students are assisted to understand clearly what they are trying to learn and what is expected of them. Assessment is seen positively as supportive of student learning and assisting students to close the gap between their current achievement and the expected goal. Assessment for learning recognizes the influence that assessment has on the motivation and self-esteem of students and provides them with constructive feedback. Assessment for learning encourages the active involvement of students in their learning and it depends on teachers' diagnostic skills to make it work (Earl, 2003).

Harlen (2008) illustrated the key aspects of formative assessment as follows: evidence is gathered about ongoing learning activities that can be used to make decisions about further learning, the evidence is judged in terms of progress toward the detailed lesson goals, these goals may vary for different individual pupils or for groups and so comparison between students are not sensible or justified, students are aware of their lesson goals and can help in deciding their next steps toward the goals, the process is cyclical and ongoing; information gathered is used as an integral part of teaching and learning, no judgment of grade or level is involved, only the judgment of how to help a learner take the next steps in learning. Information gathered frequently by the teacher will be able to feed back to correct any mistake judgment. Formative assessment incorporates tests within study units, for example, when students had finished working on a specific learning activity, in order to allow teachers to diagnose learning needs and adjust teaching at that point, classroom cultures are important to effective formative assessment practice.

2.3 Summative Assessment (Assessment of Learning)

Summative assessment is referred to as "assessment of learning" and is used to assess the skills that the students have gained by the end of a learning unit. Teachers will create a summative learning task which allows students to demonstrate the specific skills they

have been working on and teachers will assess students based on a series of performance criteria. The results of summative assessments are usually used to decide final grades, class position, promotion to the next class or level, completion of a program, etc. (McMillan, 2001).

Ashworth (1982) contended that summative assessment test is given periodically by the teacher to measure the students' knowledge and skills. Examinations or tests for such an assessment should cover the content tested and the learning objectives of a lesson, subject, course, or program. He further said that the test may be given before a teacher starts a new topic so that the teacher can ascertain the point from which to start teaching. Biggs and Tang (2007) defined summative assessment as a high-stakes type of assessment for the purpose of making final judgments about student learning outcomes and instructional effectiveness. If the test is to assess the effectiveness of teaching, the teacher must be aware of the learning objectives and must test them.

Black and William (1998) said that assessment of learning describes the extent to which students have achieved the learning goals, including the standards and demonstrates what the student knows and can do. Its purpose is summative and gives an "overview of previous learning". This is the assessment that is used to certify learning for reporting to students, the parents and the system. Assessment of learning occurs when teachers use evident to make judgment on student achievement against goals and standards. Teachers use a range of assessment tools and teaching approaches to integrate assessment in the learning and teaching process (Black and William, 1998). Denga (2003) is of the opinion that assessment of learning are generally summative in nature and are intended to measure learning outcomes and to report those outcomes to students, parents and school administrators, and to those who manage school systems and sub-systems of education.

Many researchers, from old to recent, (Scriven, 1967; Castling, 1996; Simmons, 2002; Etienne, 2007; Tambo, 2012; Lyonga, 2015; Dixson & Worrell, 2016) cited that summative assessments are used to measure what students have learnt at the end of a unit, to promote students, to ensure they have met required learning objectives and standards on the way to earning certification for school completion or to enter certain occupations, or as a method for selecting students for entry into further education. As assessment of learning, summative assessment, refers to judgment which can be justified according to specific weighted set goals, yielding either comparative or numerical ratings. The purpose of summative assessment is to make judgment about learners' final level of attainment. Thus, assessment of learning forms an end point that sums up the performance or learning level of learning outcomes. Summative assessment comes at the end of a period of successive learning episodes; and it is used to check whether the students have achieved set objective. Nitko (2004) cited that summative assessment entails the focus on final examinations by teachers, parents and students. The goal of summative assessment is to evaluate student learning at the end of an instructional unit by comparing it against some standards or benchmark.

2.4 Learning Outcomes

According to Castling (1996) learning outcomes are the end result of a whole period of learning whether the students have learned on a course or programme. The outcomes are the standards which learners must meet. Learning outcomes form an assessment specification which is used to check their level of competence. Moon, (2005) said that assessment with intended course learning outcomes is crucial to assessment-as-learning. Learning outcomes prescribe what students are expected to demonstrate what they have learned. The assessment plan shows how they will demonstrate their learning outcomes. Learning outcomes and assessment must operate in parallel if the assessment is to be valid. Obioma (1984) described learning outcomes as "*personal changes or benefits that follow as a result of learning; noting that these changes or benefits*" can be measured in terms of abilities. Learning outcomes can be succinctly defined as statements of what a learner is expected to know, understand, and/or be able to demonstrate after completion of a process of learning.

Learning outcomes are expressed in terms of the dimensions of knowledge, skills and the application of knowledge and skills to practical situations. Therefore, it is important to design learning outcomes in alignment with assessment tasks and teaching strategies, and to create opportunities for students to use learning experiences to achieve measurable outcomes. Learning outcomes inform students of what is expected of them in terms of performance, to achieve desired grades and credits. Assessment processes emphasize students' ability to link ideas, apply knowledge and solve problems. Students need not only develop deep understandings of disciplines but also develop the ability to analyze, synthesize and make inferences as well as think critically and solve practical problems (Bransford, Brown, Cocking, Donovan & Pellegrino, 2000).

Learning outcomes of student teachers could be measured during teaching practice, an essential part of the teacher education programme. Teaching practice is an important component of becoming a teacher. It provides student teachers experiences in the actual teaching and learning environment (Ngidi&Sibaya, 2003).During teaching practice, a student teacher is given the opportunity to practice the art of teaching before actually getting into the real world of the teaching profession (Kasanda, 1995). Maphosa and Shumba (2007) asserted that the term teaching practice represented the range of experiences to which student teachers are exposed when they work in classrooms and schools. They further argued that teaching practice is a challenging but important and integral part of teacher education and teacher training programmes. During teaching practice, student teachers get the opportunity to practice the different techniques and strategies they have learned during lectures in a classroom environment under the guidance of a cooperating teacher. It is geared towards preparation of new entrants into the teaching profession. The exercise is to acquaint student teachers with the knowledge and practical experiences of teaching and learning process including lesson plan preparation, presentation, classroom management, communication skills, evaluation and the required personality of professional teachers. Teaching practice is a form of work-integrated learning that is described as a period of time when students are working in

the relevant industry to receive specific in-service training in order to apply theory in practice. Thus, teaching, learning, assessment, and outcomes may be thought of in terms of a feedback loop in which teaching influences learning, learning influences outcomes, and assessment of outcomes is used to improve quality of teaching and, ultimately, learning.

3. Methods

3.1 Study Context

Teacher training programmes for nursery and primary education end with an end of training examination and certification of student-teachers for the Teacher Grade I certificate (Ngwa & Tansam, 1989; Tchombe, 2000). The state maintains significant control over teacher education by running national examinations for entry to Initial Teacher Education (ITE) programmes and for graduation from the programme as a qualified and certificated teacher (Lyonga, 2015). Given the well-known influence of final examinations over the preceding curriculum, assessment of student teachers learning in this context is a key issue. Government policy since 2003 suggests a desire to balance the expedient accreditation of teachers for government schools with promoting learning that prepares student teachers well for their future profession (Tambo, 2000; Ndongko & Nyamnjoh, 2000). In other words, there appears to be an implicit recognition that teacher education and the assessment that is inherently a part of an initial qualification programme, have both social and pedagogic purposes (Lyonga, 2015). Presently, there are state-owned teacher training colleges in all Divisions in Cameroon and also a few private-owned teacher training colleges by the Catholic Mission, Presbyterian, and Baptist (MINESUP, 1995, 1998; Tchombe, 2000; Tchombe, 2000; Dembele, 2003; Fonkeng, 2007).

Five Teacher Training Colleges in the Fako and Meme Divisions of the South West Regions were chosen for this study: two public (Government Teacher Training College – GTTC-Buea and Government Bilingual Teacher Training College – GBTTC- Kumba), one confessional (St. John Bosco Teacher Training College Buea) and two lay private (Remedial Teacher Training College Buea, and Mary Mossongo Memorial College (M^3COE), Kumba).The colleges were divided into three categories in order to compare the diversity in opinions.

Table 1: Sample distribution of teacher training colleges in Fako and Meme Divisions for the study

No	School	Class Enrolment	Sample size		
			Sample	Male	Female
1	Government Teacher Training College (GTTC) Buea	140	29	6	23
2	Government Bilingual Teacher Training College (GBTTC) Kumba	177	37	9	28
3	Remedial Teacher Training College Buea	57	12	4	8
4	Saint John BOSCO Teacher Training College Buea	82	17	6	11
5	Mary Mossongo Memorial Teacher Training College (M^3COE) Kumba	20	05	1	04
	Total	**476**	**100**	**26**	**74**

The sampled population was made up of 100 students-teachers chosen amongst the 2 Public, 2 Lay Private, and 1 Confessional Teacher Training Colleges in Fako and Meme Divisions for this study. The students in the final year classes (level three) in the five selected schools were purposively selected because the researcher wanted to get the opinions of the graduating class student-teachers who will become teachers soon after their certification examination. In selecting participants for the study among final year student-teachers, the researcher used stratified or representative sampling so that the proportion of male and female students were reflected in the sample.

3.2 Instrument for Data Collection

A questionnaire was used for gathering data on the effect of formative and summative assessment on students' learning outcomes. The questionnaire was divided into three sections, with section one containing items on respondents' demographic characteristics such as gender, age, and teaching experience of participants. The other two sections contained 12 items grouped by constructs pertaining to the role of assessment *for* learning – **formative assessment** and assessment *of* learning – **summative assessment** on the attainment of students' learning outcomes. Apart from section one which contained demographic items, the response options for all the other items on the questionnaire consisted of a four-point likert scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The questionnaire was pilot-tested with twenty student-teachers in one of the participating schools for clarity and restructuring. Section two of the questionnaire made of 12 items was divided into two parts: Formative Assessment (assessment *for* learning) and Summative Assessment (assessment *of* learning) as shown on Tables 4 and 5 below. A total of 12 items were grouped by constructs to represent the focus of the study: The role of assessment (formative and summative) on the attainment of students' learning outcomes in teacher training colleges in Cameroon.

Several contact visits to meet with directors, dean of studies, teachers, and student-teachers to explain to them the purpose of the study and to seek consent were made. The questionnaire was administered by taking them to the institutions and explaining to the

respondents. Each respondent was required to fill out the information in the questionnaire and were returned after completion. Issues of confidentiality, voluntary participation, and other ethical considerations were raised and discussed with participants. The data was coded and analyzed using Statistical Package for Social Sciences (SPSS) V.22.0. Quantitative data derived from the demographic section of the questionnaires from close-ended questions were analyzed using descriptive statistics that included the use of frequencies and percentages. The characteristics of respondents were analyzed using frequency and percentage whereas the quantitative data was analyzed using percentages scores with frequencies. The scores of each item was statistically organized and imported into SPSS V.22.0 to obtain sum, frequencies value and percentages. The percentage scores were used to interpret data gathered. The overall percentage for a decision rule guiding the responses of each of the 12 items on formative and summative assessment were calculated: A percentage range of 0 to 49 meant that the respondents generally "Disagree", and between 50 and 100 meant "Agree".

3.3 Characteristics of Study Participants

Participants of this study were student-teachers from the five selected teacher training colleges in Fako and Meme Divisions of the South West Region, who voluntarily accepted to fill-out the questionnaire (see Table 1). The sample size was made up of one hundred final year students-teachers from the five selected teacher training colleges: GTTC-Buea with population of 29 (29%), GBTTC-Kumba had the highest population 37 (37%), Remedial Teacher Training College-Buea with a population of 12 (12%), Saint John BOSCO Teacher Training College-Buea with a population of 17 (17%), and Mary Mossongo Memorial Teacher Training College-Kumba with a population of 05 (5%), see Table 1.

Table 2: Demographic Characteristics of Study Participants

Characteristics	Frequency	Percent	Cumulative percent
Gender (n = 100)*			
Male	26	26.0	26.0
Female	74	74.0	100.0
Total	**100**	**100**	
Age (n = 100)*			
15 to 19 years	00	00	00.0
20 to 25 years	34	34.0	34.0
26 to 30 years	31	31.0	65.0
30 or older	35	35.0	100.0
Total	**100**	**100**	
Teaching Experience (n = 100)*			
No	78	78.0	78.0
Yes	22	22.0	100.0
Total	**100**	**100.0**	**100.0**

*Number of Respondent is indicated in parentheses

Amongst the 100 participants who filled out the survey, 26 (26%) were male and 74 (74%) were female. With regard to age, 35 (35%) of the students-teachers were 30 years old and above, 31 (31) of respondents were between the age range of 26-30 years, furthermore, 34 (34.0%) of the students were between the age range of 20-25 years, and there were no (00%) respondents who were between the age range of 15 to 19 years old. Many of the participants 78 (78%) indicated they had no teaching experience before coming into teacher training college, while 22(22.0%) had teaching experience. Table 2 above shows demographic characteristics of study participants.

4. Findings

4.1 Formative Assessment (Assessment for Learning)

To determine the role of formative assessment on the attainment of students' learning outcomes in teacher training colleges in Fako and Meme Divisions, six items were designed with response options for respondents to choose according to their experiences on assessment for learning. When asked if self-assessment or self-reflection determines their current understanding and monitors their learning progress day-to-day, the majority of students who participated in the study, as indicated on Table 3, (that is 58.0% and 35.0%) strongly agreed and agreed that when students' self-assessment or self-reflection determines their current understanding and monitors their learning progress till the end of their training program, whereas 3.0% disagreed and 4.0% strongly disagreed. For example, there was a total of 4 and 3 respondents who strongly disagreed and disagreed (4.0% and 3.0%) respectively while a total of 58 and 35 strongly agreed and agreed respectively scoring a percentage of (58.0% and 35.0%). The decision for item one is Agree as the overall percentage for "Agree" (93.0%) is higher than the overall percentage score for "Disagree" – 7.0%.

Participants were asked to indicate if constant micro teaching enables them to improve and demonstrate competences, aptitudes and attitudes in teaching as student teachers in training, (42.0% and 44.0%) strongly agreed and agreed, whereas 10.0% disagreed and 4.0% strongly disagreed. For example, there was a total of 4 and 10 respondents who strongly disagreed and disagreed (4.0% and 10.0%) respectively while a total of 42 and 44 strongly agreed and agreed respectively scoring a percentage of (42.0% and 44.0%). The decision for item one is Agree as the overall percentage for "Agree" (86.0%) is higher than the overall percentage score for "Disagree" – 14.0%.

Table 3: Percentages of responses for formative assessment and students' learning outcomes

Survey Items	**SA n%**	**A n%**	**D n%**	**SD n%**	**Total n***	**Decision**
Student self-assessment or self-reflection determines my current understanding and monitors my learning progress day-to-day.	58 (58.0%)	35 (35.0%)	3 (3.0%)	4 (4.0%)	100 (100%)	
Total	**(93.0%)**		**(7.0%)**		**(100%)**	**Agree**
Constant micro teaching enables me to improve and demonstrate competences, aptitudes and attitudes in teaching.	42 (42.0%)	44 (44.0%)	10 (10.0%)	4 (4.0%)	100 (100%)	
Total	**(86.0%)**		**(14.0%)**		**(100%)**	**Agree**
Constant presentations enable me master and demonstrate knowledge, skills and competences in teaching and learning.	60 (60.0%)	34 (34.0%)	0 (0.0%)	6 (6.0%)	100 (100%)	
Total	**(94%)**		**(6.0%)**		**(100%)**	**Agree**
When my teachers give me quick feedback during on-going learning activities, I learn how to teach better.	65 (65.0%)	28 (28.0%)	2 (2.0%)	5 (5.0%)	100 (100%)	
Total	**(93.0%)**		**(7.0%)**		**(100%)**	**Agree**
Feedback during on-going teaching-learning activities helps me to better interact with the teacher and other students to improve on my learning.	50 (50.0%)	43 (43.0%)	5 (5.0%)	2 (2.0%)	100 (100%)	
Total	**(93.0%)**		**(7.0%)**		**(100%)**	**Agree**
Assessment information given as feedback during teaching-learning activities guides me to know my learning needs and to achieve them.	55 (55.0%)	40 (40.0%)	1 (1.0%)	4 (4.0%)	100 (100%)	
Total	**(95.0%)**		**(5.0%)**		**100%**	**Agree**
Overall percentages Agree and Disagree	**Agree (92.3%)**		**Disagree (7.67%)**			**Agree**

Participants were also asked to indicate if constant presentations enabled them master and demonstrate knowledge, skills and competences in teaching and learning, (60.0% and 34.0%) strongly agreed and agreed, whereas 0.0% disagreed and 6.0% strongly disagreed. For example, a total of 6 respondents disagreed (6.0%) while a total of 60 and 34 strongly agreed and agreed respectively scoring a percentage of (60.0% and 34.0%). The decision for item one is Agree as the overall percentage for "Agree" (94.0%) is higher than the overall percentage score for "Disagree" – 6.0%.

Students' teachers were asked whether when their teachers give them quick feedback during on-going learning activities, they learn how to teach better in training. As indicated on Table 3 above, a larger majority of them (65.0% and 28.0%) strongly

agreed and agreed, whereas 2.0% disagreed and 5.0% strongly disagreed. For example, there was a total of 5 and 2 respondents who strongly disagreed and disagreed (5.0% and 2.0%) respectively while a total of 65 and 28 strongly agreed and agreed respectively scoring a percentage of (65.0% and 28.0%). The decision for item one is Agree as the overall percentage for "Agree" (93.0%) is higher than the overall percentage score for "Disagree" – 7.0%.

Participants were asked to indicate whether providing feedback during on-going teaching-learning activities helps them to better interact with the teacher and other students to improve on learning outcomes. A large majority of respondents (50.0% and 43.0%) strongly agreed and agreed, whereas 5.0% disagreed and 2.0% strongly disagreed. For example, there was a total of 2 and 5 respondents who strongly disagreed and disagreed (2.0% and 5.0%) respectively while a total of 50 and 43 strongly agreed and agreed respectively scoring a percentage of (50.0% and 43.0%). The decision for item one is AGREE as the overall percentage for "Agree" (93.0%) is higher than the overall percentage score for "Disagree" – 7.0%.

The last item on formative assessment asked participants whether assessment information given as feedback during teaching-learning activities guides them to know their learning needs and to achieve them. A large majority of respondents (55.0% and 40.0%) strongly agreed and agreed, whereas 1.0% disagreed and 4.0% strongly disagreed. For example, there was a total of 4 and 1 respondents who strongly disagreed and disagreed (4.0% and 1.0%) respectively while a total of 55 and 40 strongly agreed and agreed respectively scoring a percentage of (55.0% and 40.0%). The decision for item one is AGREE as the overall percentage for "Agree" (95.0%) is higher than the overall percentage score for "Disagree" – 5.0%.The overall percentage for "Agree" and "Disagree" ratings for all six items on Table 3 is 92.3% for Agree and 7.7% for Disagree. Therefore, participants largely overwhelmingly agreed that formative assessment play a major role on attaining students' learning outcomes.

Summary analysis of items on Table 4 above showed that a large majority of the students' opinions (92.3%) were for the fact that formative assessment has an influence on students' learning outcomes. That is, a large majority 93% of the respondents agree that formative assessment monitors their progress and enables them demonstrate and apply the skills and knowledge acquired, while 7% were contrary to the idea. Also, 86% of the students agreed that constant micro teaching enables them to master and demonstrate competencies and skills as teachers to be. Furthermore, 94% of respondents agreed that the use of constant presentations enable students to master, demonstrate and apply knowledge, skills and competencies, on the other hand. Majority of the students (93%) opined that when the teacher gives them quick feedback, they learn better and increase their learning outcomes. In addition, 93% of the students agreed that formative assessment enables them to interact with the teacher and keeps them working constantly. And 95% of the respondents agreed that the ability of the teacher to use all the strategies in formative assessment motivate them to learn how to teach and keep working from time to time.

4.2 Summative Assessment (Assessment of Learning)

When asked if end-of-training examinations or certification examinations measures the knowledge, aptitudes, competencies and skills in teaching which they have attained or acquired in their teacher training program, the majority of student-teachers who participated in the study, as indicated on Table 4, (i.e. 79.0% and 12.0%) strongly agreed and agreed whereas 6.0% disagreed and 3.0% strongly disagreed. Therefore, a total of 3 and 6 respondents strongly disagreed and disagreed (3.0% and 6.0%) respectively while a total of 79 and 12 strongly agreed and agreed respectively scoring a percentage of (79.0% and 12.0%). The decision for this item is Agree as the overall percentage for "Agree" (91.0%) is higher than the overall percentage score for "Disagree" – 9.0%.

Further, participants were asked to indicate if teaching practice examinations challenge them to transfer what they have learned to specific and real life tasks (teaching) as student teachers in training. A larger majority (40.0% and 53.0%) strongly agreed and agreed, whereas 2.0% disagreed and 5.0% strongly disagreed. Thus, a total of 5 and 2 respondents strongly disagreed and disagreed (5.0% and 2.0%) respectively while a total of 40 and 53 strongly agreed and agreed respectively scoring a percentage of (40.0% and 53.0%). The decision for this item on teaching practice is Agree as the overall percentage for "Agree" (93.0%) is higher than the overall percentage score for "Disagree" – 7.0%.

Table 4: Percentages of responses for summative assessment and students' learning outcomes

Item	**SA n%**	**A n%**	**D n%**	**SD n%**	**Total n***	**Decision**
End-of-training examinations or certification examination measures the knowledge, aptitudes, competencies and skills in teaching which I have attained or acquired in my teacher training program.	79 (79.0%)	12 (12.0%)	6 (6.0%)	3 (3.0%)	100 (100%)	
Total	**(91.0%)**		**(9.0%)**		**(100%)**	**Agree**
My teaching practice examinations challenges me to transfer what I have learned to specific and real life tasks (teaching).	40 (40.0%)	53 (53.0%)	2 (2.0%)	5 (5.0%)	100 (100%)	
Total	**(93.0%)**		**(7.0%)**			**Agree**
My end-of-term examinations provide an opportunity for me to evaluate my knowledge and progress on how to become a teacher.	49 (49.0%)	43 (43.0%)	5 (5.0%)	3 (3.0%)	100 (100%)	
Total	**(92%)**		**(8.0%)**		**(100%)**	**Agree**
The more I do well in my end-of-term examinations, the more I will perform better in my final examination to become a teacher.	49 (49.0%)	45 (45.0%)	1 (1.0%)	5 (5.0%)	100 (100%)	
Total	**(94.0%)**		**(6.0%)**		**(100%)**	**Agree**

My end-of-term examinations make me to put into practice the knowledge and skills attained during my teaching-learning activities for that period.	46 (46.0%)	49 (49.0%)	4 (4.0%)	1 (1.0%)	100 (100%)	
Total	**(95.0%)**		**(5.0%)**		**(100%)**	**Agree**
My final examinations provide meaningful feedback about the outcomes of my learning activities in my training program.	47 (47.0%)	38 (38.0%)	6 (6.0%)	9 (9.0%)	100 100%	
Total	**(85.0%)**		**(15.0%)**		**(100%)**	**Agree**
Overall percentages Agree and Disagree	**91.70%**		**8.30%**			**Agree**

Participants were also asked to indicate if their end-of-term examinations provide an opportunity for them to evaluate their knowledge and progress on how to become a teacher. Majority of the respondents (49.0% and 43.0%) strongly agreed and agreed, whereas 5.0% disagreed and 3.0% strongly disagreed. Thus, a total of 5 and 3 respondents disagreed (5.0% and 3.0%) while a total of 49 and 43 strongly agreed and agreed respectively scoring a percentage of (49.0% and 43.0%). The decision for this item is Agree as the overall percentage for "Agree" (92.0%) is higher than the overall percentage score for "Disagree" – 8.0%.

Student-teachers were asked whether the more they do well in their end-of-term examinations, the more they performed better in their final examination to become a teacher. As indicated on Table 4 above, a larger majority of them (49.0% and 45.0%) strongly agreed and agreed, whereas 1.0% disagreed and 5.0% strongly disagreed. Therefore, a total of 5 and 1 respondents who strongly disagreed and disagreed (5.0% and 1.0%) respectively while a total of 49 and 45 strongly agreed and agreed respectively scoring a percentage of (49.0% and 45.0%). The decision for this item is Agree as the overall percentage for "Agree" (94.0%) is higher than the overall percentage score for "Disagree" – 6.0%.

Moreover, participants were asked to indicate whether end-of-term examinations make them put into practice the knowledge and skills attained during their teaching-learning activities for that period. A large majority of respondents (46.0% and 49.0%) strongly agreed and agreed, whereas 4.0% disagreed and 1.0% strongly disagreed. Thus, a total of 1 and 4 respondents who strongly disagreed and disagreed (1.0% and 4.0%) respectively while a total of 46 and 49 strongly agreed and agreed respectively scoring a percentage of (46.0% and 49.0%). The decision for this item is Agree as the overall percentage for "Agree" (95.0%) is higher than the overall percentage score for "Disagree" – 5.0%.

The last item on summative assessment asked participants to indicate whether their final examinations provide meaningful feedback about the outcomes of their learning activities in their training program. Majority of respondents (47.0% and 38.0%) strongly agreed and agreed, whereas 6.0% disagreed and 9.0% strongly disagreed.

Therefore, a total of 9 and 6 respondents strongly disagreed and disagreed (9.0% and 6.0%) respectively while a total of 47 and 38 strongly agreed and agreed respectively scoring a percentage of (47.0% and 38.0%). The decision for this item is Agree as the overall percentage for "Agree" (85.0%) is higher than the overall percentage score for "Disagree" – 15.0%. The overall percentage for "Agree" and "Disagree" ratings for all six items on summative assessment (Table 4) is 91.70% for Agree and 8.30% for Disagree. Therefore, participants largely agreed that summative assessment play a major role on attaining student-teachers' learning outcomes. Analysis of the 6 items for summative assessment revealed that a large majority of the student-teachers' opinion (91.7%) were for the fact that summative assessment has an influence on their learning outcomes. That is, 91% of the student-teachers agreed that the ability of the teacher to test them at the end of the unit, course or programme provided them with the opportunities to demonstrate the skills, knowledge and attitudes that provided evidence that learning has occurred. Furthermore, 93% of the respondents reported that summative assessment challenges them to transfer what they have learned to specific and real life tasks (teaching).Again, 92% of the respondents reported that summative assessment (examination) proves to them that they are progressing in their knowledge and skills to become a teacher. Also, 94% of the students agreed that summative assessment determined their final grades for a given period of time through a series of periodic assessment comprising of test and non-test measures. Equally, 95% of the respondents reported that their ability to be assessed at the end of the course or programme enhances them to put into practice the knowledge and skills in the teaching practice. Finally, 85% of students agreed that providing meaningful feedback motivated them to learn.

5. Discussion, Conclusion, and Recommendations

Majority of the respondents agreed that formative assessment monitored their progress and enable them to demonstrate the skills and knowledge acquired during teaching-learning process. When a teacher teaches and monitors students' progress and gives feedback, students learn better. Through the consistent use of formative assessment, teachers can quickly gather data to determine whether students are mastering the goals and standards or if there are gaps in students' learning. Teachers can then use this information to establish priorities for future lessons. Assessment for learning helps to determine which students need a different approach, which students need immediate attention, which students are not learning as a result of not being challenged as the case of final year students in teacher training colleges in Fako and Meme Divisions. From this point, the teacher can provide corrective and enrichment activities as appropriate for each students' improvement. Corrective activities must present information in a new way and engage students in different types of learning experiences. Using formative assessment at the end of each learning unit helps consolidate a skill, (when objectives are achieved as a result of teaching a unit), students' learning outcomes will be influenced. Formative assessment follow up a lesson or unit step by step, increases levels of understanding,

accommodate knowledge in bits, teaching and learning will be alert. Therefore, formative assessment is meant to improve learning and help shape and direct the teaching-learning process (Tchombe, 2004). Within formative assessment, the teacher identifies the weak students so that amelioration can be done, modify and plan remedial work. Also, Sadler (1989) said that formative assessment judges the quality of students' responses which can be used to shape and improve the understanding. Santrock (2004) commended that formative assessment is the frequent, interactive assessment of students' progress to identify learning needs and shaping the teaching process.

Spolsky and Hult (2008) suggested that formative assessment provides feedback for teachers to modify subsequent learning activities and experiences. Similarly, other studies have shown the positive impact of formative assessment on the final outcome of medical programs by producing competent physicians (Chisnall, Vince, Hall, & Tribe, 2015; Mitra & Barua, 2015).Additionally, formative assessment aids to identify and remediate students' deficiencies. Cauley and McMillan (2010) indicated that frequent formative assessment allows the students to have a better grasp of learning activities and enhances self-regulated learning (Nicol & Macfarlane, 2006). Equally, this study supports the importance and the exploration of the direct impacts of formative assessment on the immediate learning outcomes of summative assessment in teacher training education programs in Cameroon. Therefore, summative assessment enables student-teachers to put into practice the knowledge and skills in real life situations. It sums up all learning outcomes at the conclusion of a defined instructional period, typically at the end of a unit, course, program, or certification examinations. When the students are assessed at the end of a unit or episode, it provides them with the opportunities to demonstrate the skills, knowledge and attitudes that provide evidence that learning has occurred. By doing that the students will be challenged to transfer what they have learned to specific and real life situations.

The findings of this study are consistent with Black and William (2009) who said that assessment of learning describe the extent to which students have achieved the learning goals, including the standards and demonstrates what the student knows and can do. Assessment of learning occurs when teachers use evident to make judgment on student achievement against goals and standards. Simmons (2002) cited that summative assessments are used to measure what students have learnt at the end of a unit, to promote students, to ensure they have met required standards on the way to earning certification for school completion or to enter certain occupations, or as a method for selecting students for entry into further or higher learning.

The general findings of this study revealed that assessment (formative and summative) enhanced the learning outcomes of student-teachers. Assessment of learning describes the extent to which students have achieved the learning goals, including the standards and demonstrates what the student knows and can do. Lyonga (2015) cited that the relationship between assessment and learning outcomes is fundamental to formal learning, which on the one hand ideally seeks to know and build on what has already been learnt, and on the other hand usually requires some measure of what has

been learnt to judge either the learner or the teacher, or both in an authentic situation. With formative assessment, teachers can quickly gather data to determine whether students are mastering the goals and standards or if there are gaps in students' learning; that teachers rarely carry out remediation. To solve this problem, teachers could make sure they fill these gaps by carrying out remediation and enrichment if necessary. With summative assessment, the researcher realized that some teachers assess based on examination perspectives. They rush in order to finish the syllabus. They do not have time for remediation to fill the gaps that exists in given lessons. Sometimes students do not really master the concepts. To address this problem, more time could be given for theory into practice especially during teaching practice. Teaching practice is the time when student-teachers put into practice all what they were taught in the classroom. The duration of teaching practice could be increased so that students could really have enough time into practice teaching.

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